

IN THE CLAIMS:

Please cancel claims 10-19 and 22 without prejudice to or disclaimer of the subject matter recited therein.

Please amend Claims 1, 8 and 9, as follows:

1. (Currently Amended) An image processing apparatus comprising:
input means for inputting original image data showing an original image, wherein the original image data is constructed by a plurality of bit planes including a first bit plane and a second bit plane;
compressing means for lossless-compressing ~~data of at least a first predetermined bit plane of the original image data to form compression data~~the first bit plane and the second bit plane so that, in a case where the compressed first bit plane and the compressed second bit plane are composited, an amount of composite compressed data is smaller than a data amount of one uncompressed bit plane; and
data compositing means for compositing the compressed first bit plane and the compressed second bit plane to generate the composite compressed data;
first substituting means for substituting the composite compressed data for the uncompressed first bit plane of the original image data; and
second substituting means for substituting additional information for the uncompressed second bit plane of the original image data.first embedding means for embedding the compression data obtained by said compressing means into the first predetermined bit plane of the original image data.

2. (Previously Presented) An apparatus according to claim 1, wherein the first predetermined bit plane is a lower bit plane.

3. (Previously Presented) An apparatus according to claim 1, wherein said compressing means compresses the data of the first predetermined bit plane and data of a second predetermined bit plane of the original image data, and said apparatus further comprises second embedding means for embedding additional information into the second predetermined bit plane.

4. (Previously Presented) An apparatus according to claim 3, wherein the second predetermined bit plane is an upper bit plane.

5-6. (Canceled)

7. (Previously Presented) An apparatus according to claim 1, wherein said original image data comprises color components of RGB.

8. (Currently Amended) An image processing method comprising:
an input step of inputting original image data representing an original image, wherein the original image data is constructed by a plurality of bit planes including a first bit plane and a second bit plane;

a compressing step of lossless-compressing data of at least a first predetermined bit plane of the original image data to form compression data; and a first embedding step of embedding the compression data obtained in the compressing step into the first predetermined bit plane of the original image data;
the first bit plane and the second bit plane so that, in a case where the compressed first bit plane and the compressed second bit plane are composited, an amount of composite compressed data is smaller than a data amount of one uncompressed bit plane;

a data compositing step of compositing the compressed first bit plane and the compressed second bit plane to generate the composite compressed data;

a first substituting step of substituting the composite compressed data for the uncompressed first bit plane of the original image data; and

a second substituting step of substituting additional information for the uncompressed second bit plane of the original image data.

9. (Currently Amended) A storage medium which stores an image processing program so that it can be read out by a computer, wherein said program comprises:

an input step of inputting original image data showing an original image, wherein the original image data is constructed by a plurality of it planes including a first bit plane and a second bit plane;

a compressing step of lossless-compressing the first bit plane and the second bit plane so that, in a case where the compressed first bit plane and the compressed second bit plane are

composed, an amount of composite compressed data is smaller than a data amount of one uncompressed bit plane;

a data compositing step of compositing the compressed first bit plane and the compressed second bit plane to generate the composite compressed data;

a first substituting step of substituting the composite compressed data for the uncompressed first bit plane of the original image data; and

a second substituting step of substituting additional information for the uncompressed second bit plane of the original image data of at least a first predetermined bit plane of the original image data to form compression data; and

a first embedding step of embedding the compression data obtained in the compressing step into the first predetermined bit plane of the original image data.

10-19. (Canceled)

20. (Previously Presented) An apparatus according to claim 1, wherein the compression by the compressing means is reversible compression.

21. (Previously Presented) An apparatus according to claim 1, wherein the first embedding means embeds the data as an invisible watermark.

22. (Canceled)